

Remarks

Claims 1-5, 7, 9-20 and 50 were rejected under 35 UCS 112, 2<sup>nd</sup> parag. as indefinite. Clarification was requested as to whether step C requires actual contact with the fibrous substrate surface or whether this is inclusive of contact with the metathesized material on the fiber.

Applicants refer to page 29, first paragraph. Once catalyst is available at the surface and metathesizable material is brought into contact with the catalyst, the material begins to react. In the fourth paragraph of page 29, the contact of the second substrate is made before curing is complete. Claim 1 is amended to clarify that bonding between said substrates occurs by curing of the metathesizable material therebetween.

Applicants submit the above amendment overcomes the rejection under 35 U.S.C. 112, and respectfully request removal of the rejection.

Claim 50 was cited as referring to post vulcanized elastomer or cured elastomer. Specification page 6, line 35 mentions that these terms are used interchangeably. These are recognized terms of art that may constitute separate meanings. It is well known that vulcanizing is a curing method for unsaturated elastomers, such as by peroxides and/or sulfur donors. Whereas "cured elastomer" is a more general term that is not limited to vulcanization-type curing.

It was stated that it is not clear how these terms relate to steps defined in claim 1. These terms do not relate to those steps. They describe the state of the second elastomer at the time of bonding. One of ordinary skill would make the distinction that the elastomer substrate by being already in a substantially cured, or post-vulcanized state, is not intended to undergo substantial further curing after it is bonded to the first substrate.

Rejections under 35 U.S. C. 103(a)

Claims 1-5, 10, 16-20 and 50 were rejected under 35 USC 103(a) as unpatentable over JP 7-188636 ('636) taken in view of EP 424833. Applicants traverse the rejection. Applicants note that the adhesive in JP '636 adhesive (C) is unsaturated polyester prepolymer and peroxide curing agent. It is abundantly clear that this adhesive is not a metathesizable material, but is known in the art as U-PET, used in gel coating fiber reinforcements, such as in spray up- lay-up. The first substrate employed is an already molded / formed resin article. The fiber-reinforced polyester second substrate is a well-known composite, which is bonded to a variety of materials for rigidifying.

This method comprises bonding polyester reinforced panel using unsaturated polyester (u-PET) cured by peroxides. This bears no resemblance of utilizing a metathesis catalyst and metathesizable material.

Goodall (EP 833), is a non-related RIM method having nothing to do with unsaturated PET. This reference teaches Reaction Injection molding of fibers to form a molded (in-mold) fiber composite and bears nothing technically to bonding of two substrates by way of the claimed method.

In order to sustain an obviousness rejection applying two references, each must be in the same technical field, and the combination must at least teach or suggest invention as a whole, having regard for every element. RIM and U-PET lay-up bonding are not in the same technical field. Applicants' specification has been used in a hindsight reconstruction using Applicants' teaching as a guide in an attempt to strain the clear teachings of two unrelated references to appear relevant to one another, and to assert that their combination is suggestive of the claimed invention. This is incorrect. The references individually and taken together do not teach or suggest the invention, and there is nothing suggestive of any manner in which RIM process can be applied to a lay-up bonding using a peroxide cured liquid resin like u-PET. Applicants respectfully request removal of the rejection under 35 USC 103(a) and passage of the application to allowance.

Claims 1-5, 7, 10, 16-20 and 50 were rejected under 35 USC 103(a) as unpatentable over Suzuki (US 5 137 785) taken in view of EP 424833. Applicants traverse the rejection.

Applicants have previously fully described Suzuki, which is directed to a molding operation where a pre-formed norbornene polymer sheet is partially encased by flowing monomer into the mold, polymerizing the monomer against one side, leaving a side of the sheet exposed on release from the mold. There is no resemblance, teaching or suggestion to modify this procedure to introduce a second substrate, introducing metathesizable catalyst on one substrate, flowing metathesizable material to contact the catalyst at the surface, and before curing of the metathesizable material, joining a second substrate. These novel and unrelated aspects were lifted from Applicants invention and read on the prior art.

The secondary reference Goodall is directed to RIM molding to form a fiber reinforced composite. Taken together, the references do not teach or suggest the invention as claimed and the rejection must fail.


Claims 11-15 are rejected under 35 USC 103(a) as unpatentable over JP 7-

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188636 ('636) taken in view of EP 424833 OR Suzuki '785 taken in further view of EP 424833 as applied above and further in view of the admitted state of the prior art.

Applicants traverse the rejection. The Patent Office has abstracted the question of patentability to the point where an assertion is made that selection of catalysts is not deemed to contribute patentability. This assumes that proper rejections were made as applied above. Different molding art has been applied to bonding art that involves unrelated chemistry. Neither of the combinations of references is seen to be suggestive of the claimed invention. If the underlying basis for unpatentability is not properly presented, the issue of monomer selection is not dispositive. All materials used in Applicants' invention are old in the art. The issue for patentability is whether the prior art would have suggested to one of ordinary skill to arrange the elements and bond them according to the claims. In rejection over JP '767, there was no teaching to use a metathesis catalyst and metathesizable material in a bonding system to joint two substrates by the claimed method steps. Finding a result that strong, structural bonds takes place was surprising. Extensive experimentation included in the description shows this bonding system to be robust. In the other rejection, Suzuki is the same kind of in-molding method to encase a single substrate. This reference taken together with the secondary reference just is not suggestive of the claimed invention. Applicants have presented patentable subject matter, request rejoinder of withdrawn claims before the Office and earnestly await an indication of allowance.

Respectfully submitted,



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Date: April 19, 2005 by: Heather B. Caruso

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